Work Order ID 112033

Tuesday, January 28, 2014 1:41:35 PM

112033

Item ID: D4885-2
Revision ID:
Item Name: End Fitting
Start Date: 1/28/2014 **Start Qty:** 5.00 ~~*5*~~
Required Date: 2/21/2014 **Req'd Qty:** 5.00 ~~*5*~~ 4X
Reference:

Accept *N900040100*

Setup Start *NS1*
Stop *NS2*

Cust Item ID:
Customer:

Approvals: **Process Plan:** mnf. **Date:** 14-1-28 **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*
Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D4885									
100		0.00							
100		0.00				cmk	14/1/30		
Outsource5	**Memo**								
Outsource process - Machining	ISSUE P/O: 128,18 POSSIBLE SUPPLIER:ATG C OF C IS REQUIRED								
110	QC6- Inspect dimensions to drawing	0.00 DAS 27 9-89							
110		0.00 14/3/24				PTO → 3-1			
QC	**Memo**								
Quality Control									
150		0.00							
150	PURCHASING								
Purchasing	**Memo**	0.00 LPI done N/A Q A.T.G				CL 14/03/24			
Purchasing	Issue P/O: _____ LPI Per ASTM 1417 LEVEL 2 Certificate of conformaty is required								

DQA: [signature] Date: 14/05/10

Supplier NCR 14-3815

QA Closed: [signature] Date: 14-4-30

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

Work Order update only ☐

Work Order: 112033

Part No. D48805-2

NCR No. 14-3781

DISPOSITION

Rework	☐
Scrap	☒
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Crosstube	☐	Water Jet	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐
Large Fab	☐	Composite	☐	Supplier	☒

Engineering	☐				
Quality	☐				
Other	☐				
	☐				

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐	14/4/8	100	4	∅ 0.670 +0.000 −0.001 is	DAS 12 9-89	Engine mount parts are critical and can't be deviated.	DAS 27 9-89	DAS 27 9-89	DAS 16 9-89
Doc/Data	☐			1	∅0.6684.			14/4/15	14/4/15	14/04/08
Equip/Tooling	☐			4		14/4/8	SCRAP affected parts			
Handling/Pre	☐			14/4/8	Rc. machine incorrectly at supplier		86.69 $156.12			
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☒									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☒ Other

machine incorrectly @ supplier

Work Order ID 112033

Tuesday, January 28, 2014 1:41:35 PM

112033

Item ID: D4885-2 **Accept** *N900040100* **Setup Start** *NS1*

Revision ID: **Stop** *NS2*

Item Name: End Fitting

Start Date: 1/28/2014 **Start Qty:** 5.00 *5*

Required Date: 2/21/2014 **Req'd Qty:** 5.00 *5*

Reference:

Cust Item ID:

Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Receive & Inspect for Damage & Mat'l Certs	0.00							
160						4x		SP 14-3-21	
Packaging	**Memo**	0.00							
Packaging	Ensure certificate of conformity is attached								
	identify ST139E 2 Stores +1 Process.					3x		APR 16 2014	
190	QC21- Final Inspection - Work Order Release	0.00							
190							14-4-16		
QC	**Memo**	0.00							
Quality Control									

H-04-16

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

- Skid-tube ☐
- Machining ☐
- Thermoforming ☐
- Large Fab ☐
- Crosstube ☐
- Small Fab ☐
- Finishing ☐
- Composite ☐
- Water Jet ☐
- Prod. Eng. Coor. ☐
- Rec/Store/Packaging ☐
- Supplier ☐
- Engineering ☐
- Quality ☐
- Other ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

- ☐ Bending
- ☐ Centre Not Concentric
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- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General

- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function
- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence
- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge
- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

Picklist Print

Tuesday, January 28, 2014 1:41:34 PM

Work Order ID: 112033

Parent Item: D4885-2

Parent Item Name: End Fitting

Start Date: 1/28/2014 **Required Date:** 2/21/2014

Start Qty: 5.00 **Required Qty:** 5.00

Comments: IPP REV:A NEW ISSUE 14-01-28 JLM VERIFIED BY:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4885-2P End Fitting		Purchased	No				Each	0.0000		4 x 5 4 SD 14-3-24			
M174PH-H900R2.000 17-4SS H900 ROUND BAR 2.000		Purchased	No				f	6.0000		3 CY 14/01/30			

Location	Loc Qty	Loc Code
MAT031	6	
M127334 ✓	6	3

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

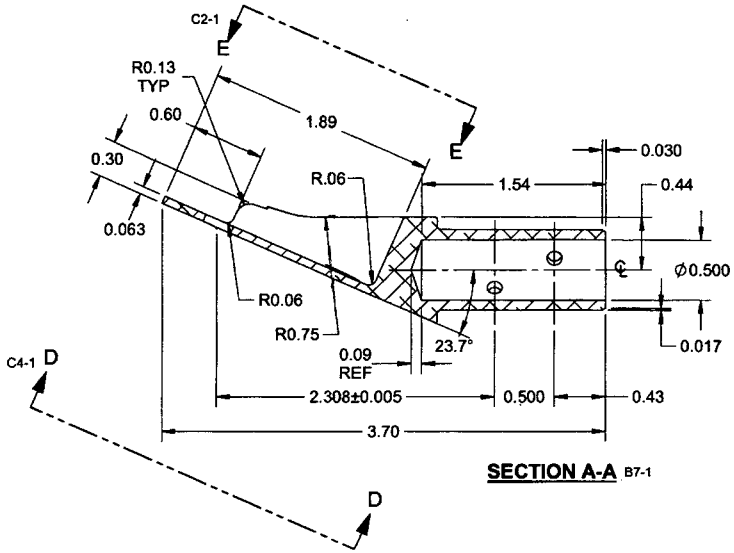
FAULT CATEGORY

Landing Gear

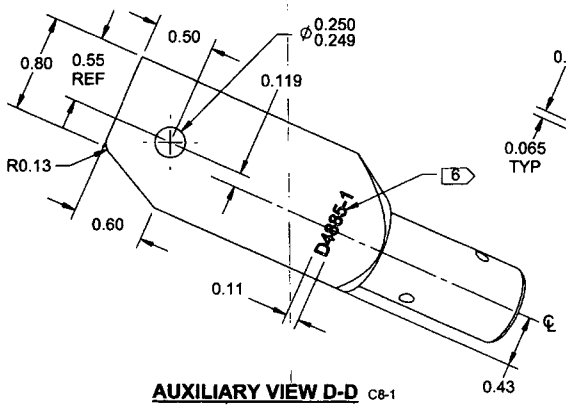
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

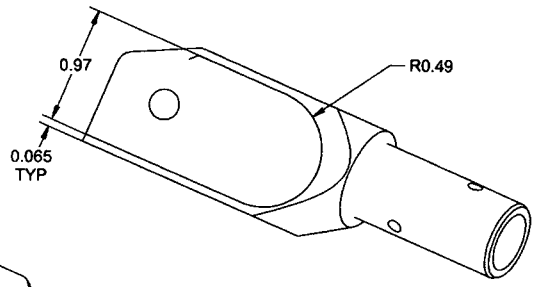
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
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☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



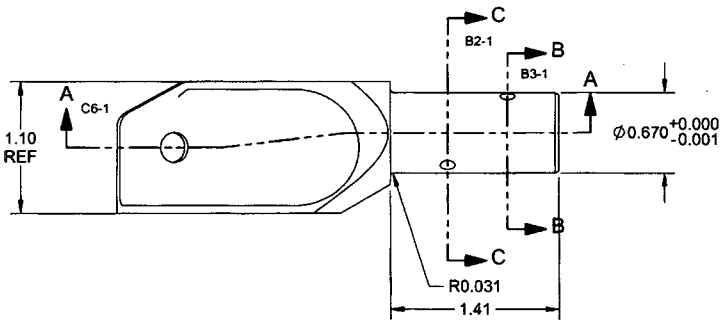
SECTION A-A B7-1

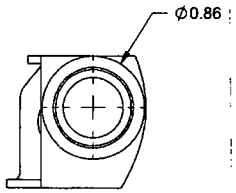


AUXILIARY VIEW D-D C8-1

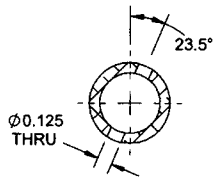


AUXILIARY VIEW E-E D7-1

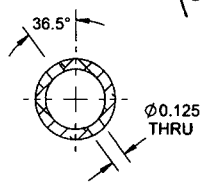




D4885-1 END FITTING



SECTION B-B B6-1



SECTION C-C B6-1

ME
#112033
14-1-28

2013-12-12

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.21 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	RF	13.09.16

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	RF	
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 1 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

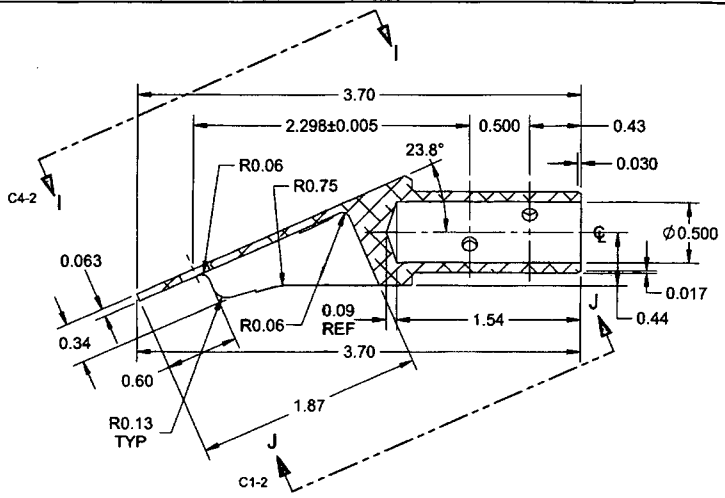
FAULT CATEGORY

Landing Gear

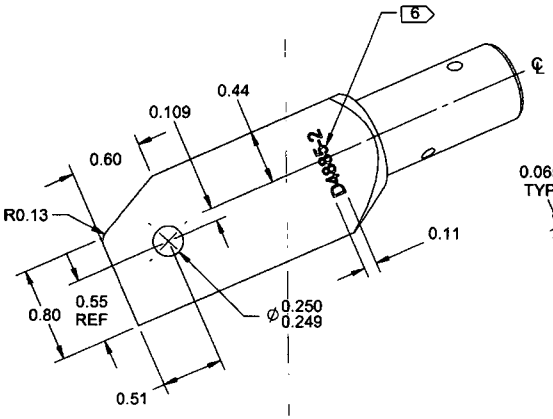
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

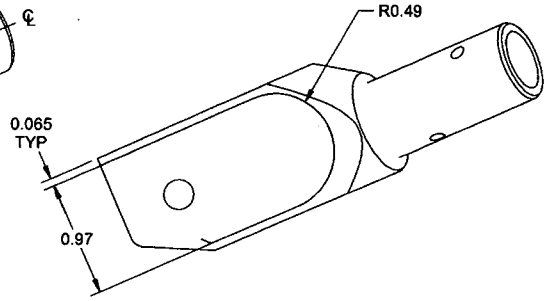
☐ Bend
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☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
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☐ Weld
☐ Wrong Stock Pulled
☐ Other



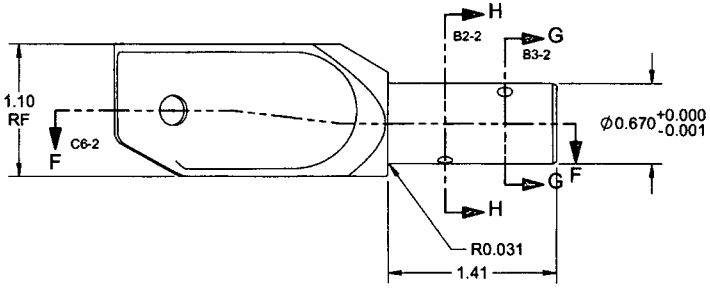
SECTION F-F B8-2

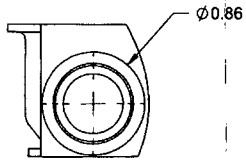


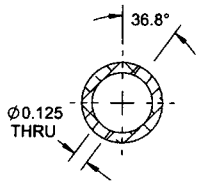
AUXILIARY VIEW I-I D8-2

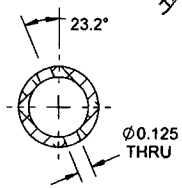


AUXILIARY VIEW J-J C7-2









SECTION G-G B6-6

SECTION H-H B6-6

D4885-2 END FITTING

112033

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

2013-12-12

APPROVED

DESIGN	RF	**DART AEROSPACE LTD**
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	DC	DRAWING NO. D4885 — REV. A
MFG. APPR.	JLM	SHEET 2 OF 5
APPROVED	HS	TITLE: END FITTING — SCALE: NTS
DE APPR.	DS	
DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

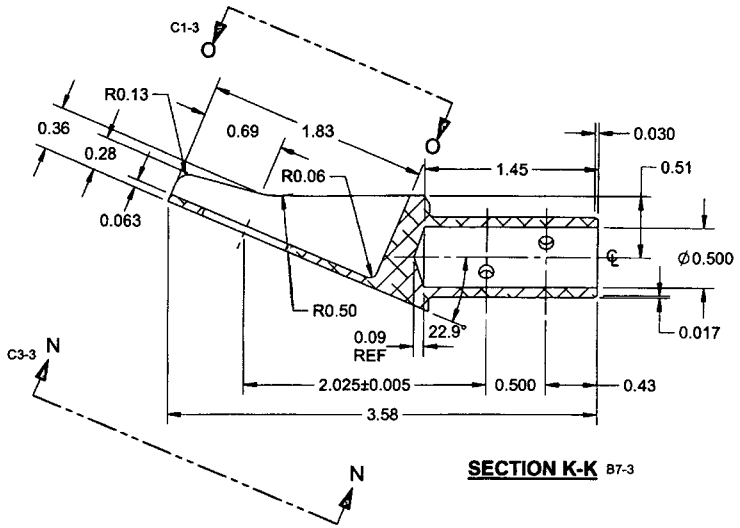
FAULT CATEGORY

Landing Gear

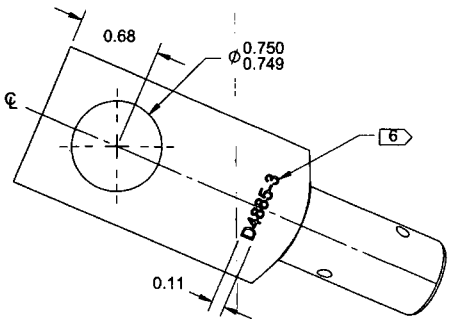
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☐ Centre Not Concentric
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☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

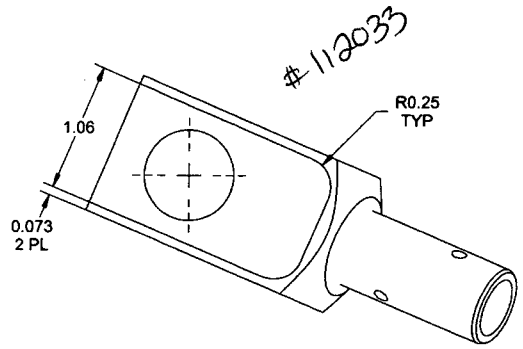
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



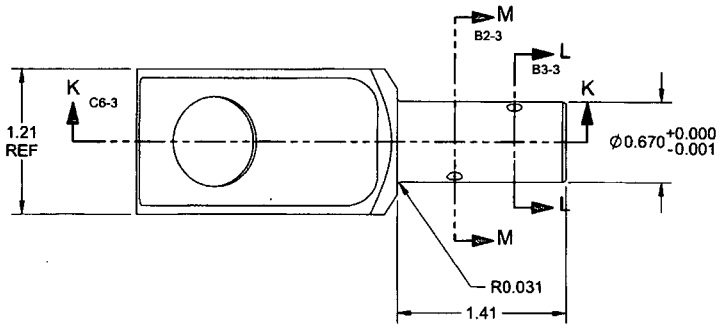
SECTION K-K B7-3

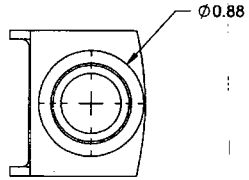


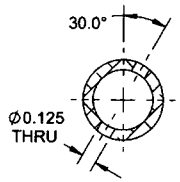
AUXILIARY VIEW N-N C8-3



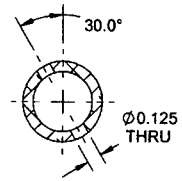
AUXILIARY VIEW O-O D7-3







SECTION L-L B6-3



SECTION M-M B6-3

D4885-3 END FITTING

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

2013-12-12

APPROVED

DESIGN	RF	**DART AEROSPACE LTD**
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 3 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

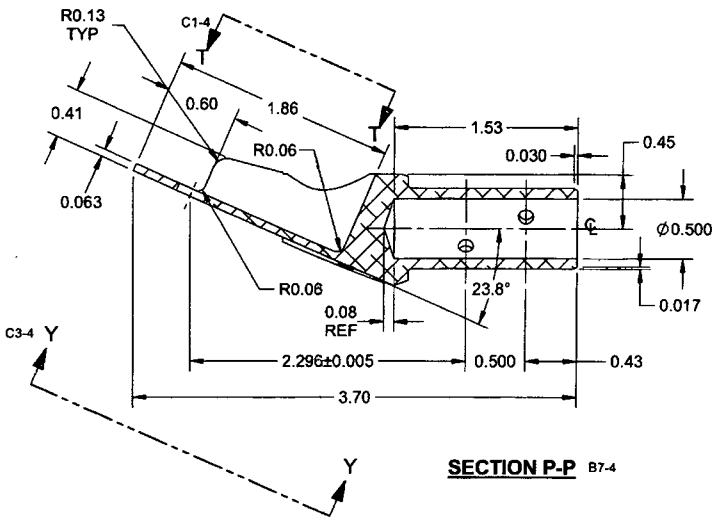
FAULT CATEGORY

Landing Gear

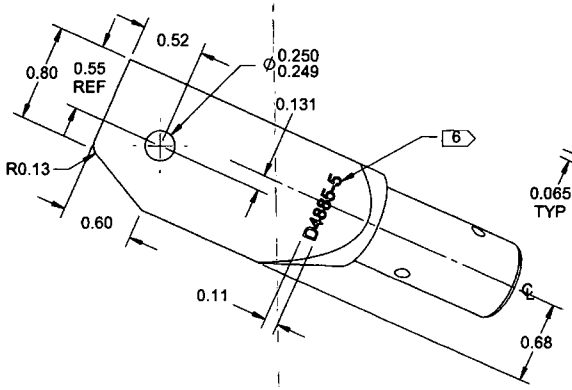
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

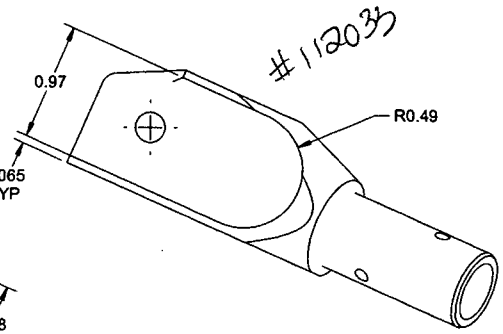
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



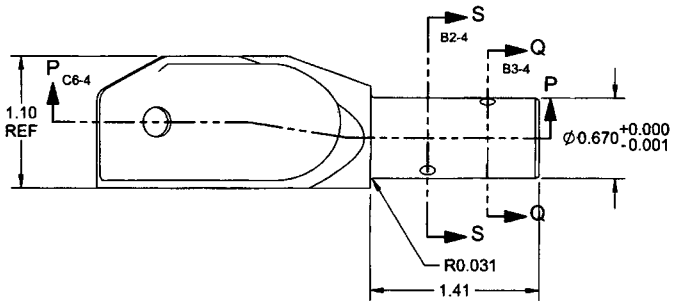
SECTION P-P B7-4

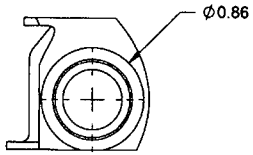


AUXILIARY VIEW Y-Y C8-4

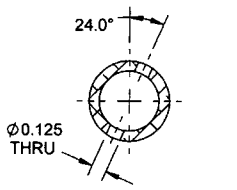


AUXILIARY VIEW T-T D7-4

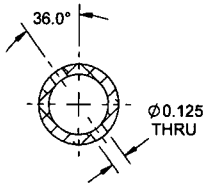




D4885-5 END FITTING



SECTION Q-Q B6-4



SECTION S-S B6-4

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.21 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

2013 -12- 12

APPROVED

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 4 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

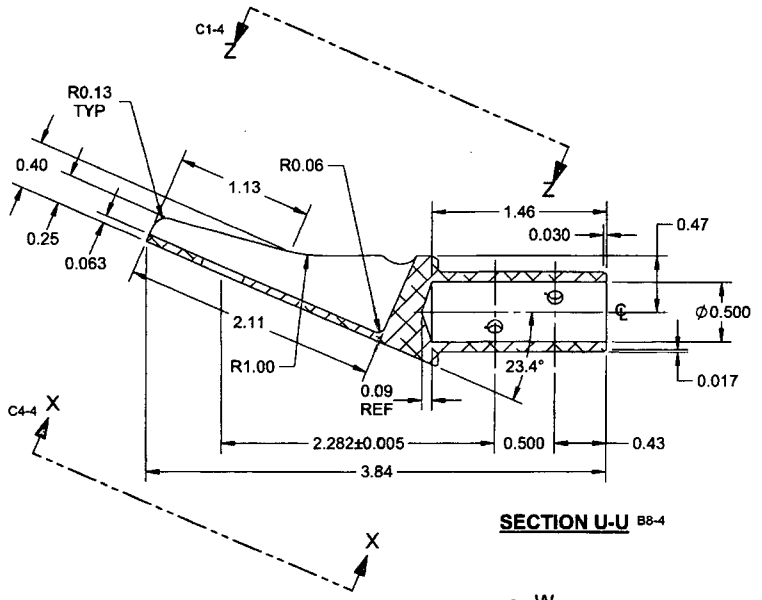
FAULT CATEGORY

Landing Gear

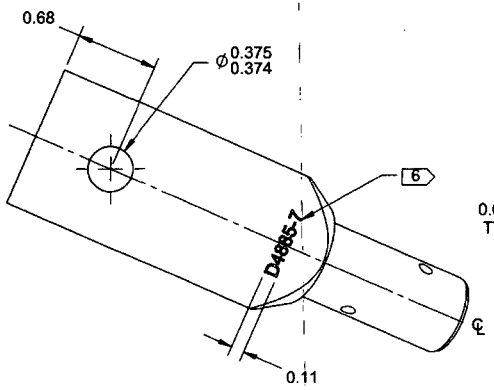
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

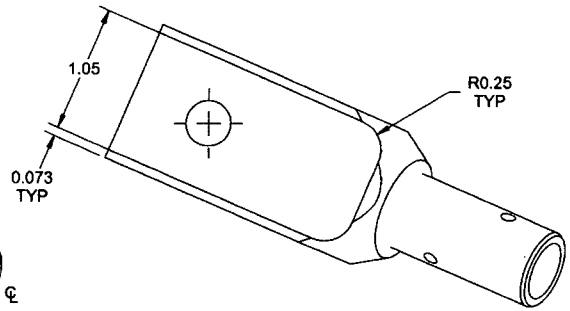
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
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☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other



SECTION U-U B8-4

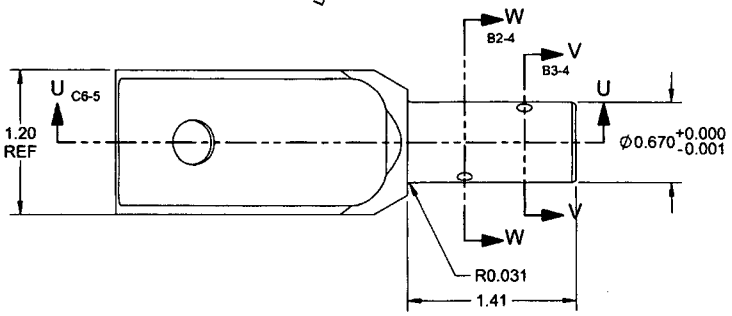


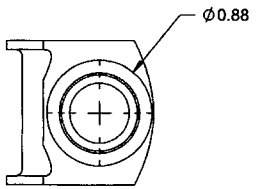
AUXILIARY VIEW X-X C8-4



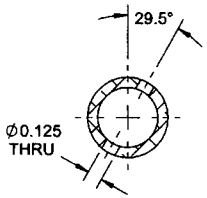
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AUXILIARY VIEW Z-Z D7-4

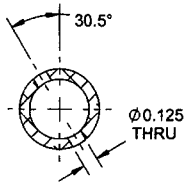




D4885-7 END FITTING



SECTION V-V B6-4



SECTION W-W B6-4

NOTES:
1) MATERIAL: 17-4 PH/S17400/TYPE 630 SS ROUND BAR, H900 CONDITION
PER AMS 5643/ASTM A564
DART SPEC M17-4-R
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3.
ENGRAVE P/N USING 0.11 HIGH LETTERS TO A MAX. DEPTH OF 0.010
7) WEIGHT: 0.22 lbs
8) LIQUID PENETRANT INSPECT PER QSI 038 6.1.1 (ASTM E1417 LEVEL 2)

DJ 2013-12-17

APPROVED

DESIGN	RF	DART AEROSPACE LTD
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA
CHECKED	DC	DRAWING NO. D4885 REV. A
MFG. APPR.	JLM	SHEET 5 OF 5
APPROVED	HS	TITLE END FITTING SCALE NTS
DE APPR.	DS	
DATE	13.12.01	

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: Date:

Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function
☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence
☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge
☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled
☐ Other

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 907587 Date: 19-Mar-14

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Ship To

Michael Gregoire
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Terms	Ship Via

Quantity	Description
	PLEASE REFERENCE THE PACK LIST NUMBER ON ALL CORRESPONDENCE TO THIS SHIPMENT. IF YOU HAVE ANY QUESTIONS, PLEASE CALL AT (613) 446-4544.
4 ea	Part: D4885-1P Rev: A END FITTING Job: 15704 PO: PO22838 Line: 1
3 ea	Part: D4871-3P Rev: A END FITTING Job: 15714 PO: PO22838 Line: 11
5 ea	Part: D4870-1P Rev: A END FITTING, SMALL Job: 15718 PO: PO22838 Line: 15
5 ea	Part: D4884-3P Rev: A END FITTING, EYE Job: 15721 PO: PO22838 Line: 18
4 ea	Part: D4885-2P Rev: A END FITTING Job: 15705 PO: PO22838 Line: 2
6 ea	Part: D4885-3P Rev: A END FITTING Job: 15706 PO: PO22838 Line: 3
	DATE : 19 Mar 2014 CERTIFIED SIGNATURE: JAyotte RECEIVER SIGNATURE : CERTIFICATE OF CONFORMANCE A.T.G. INDUSTRIES INC. CERTIFIES THAT ALL ITEMS IN THIS SHIPMENT ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS REFERENCED IN THE ABOVE PURCHASE ORDER.

ATG INDUSTRIES INC.

731 INDUSTRIELLE ST.
ROCKLAND, ONTARIO
K4K 1T2

(613) 446-4544
(613) 446-4556 (FAX)

DATE: **March 19, 2014**

TO: **Dart Aerospace LTD**
1270 Aberdeen St.
Hawkesbury, ON K6A 1K7

ATG S.O. #	CUST. P.O. #	SHIPPED VIA	F.O.B. SHIPPING POINT	SHIPPING CARTON
895327070RT	PO22838	OUR TRUCK	ATG	

QTY	PART NUMBER	REV	DESCRIPTION
1	D4885-2P	A	
			Ø.670 +.000 -.005 IS AT Ø.6684
			TRAVELER 15705
			MADE IN CANADA

CERTIFICATE OF CONFORMANCE
ISO 9001 : 2008 REGISTERED

ATG Industries Inc. certifies that all items in this shipment are in conformance with the requirements, specifications, and drawings referenced in the above purchase order.

Signature: _____ **Date:** **March 19, 2014**

Received by: _____ **Date:** _____

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE STREET
ROCKLAND, ON K4K 1T2
Canada

Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 907587 Date: 19-Mar-14

To

DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Ship To

Michael Gregoire
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613 632-9577 Fax: 613 632-1053

Terms	Ship Via

Quantity	Description
	I.S.O. 9001 : 2008 REGISTERED / MADE IN CANADA

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO22838

Purchase Order Date 1/30/2014
PO Print Date 1/30/2014

Order From : VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name		**Buyer**	Michael Gregoire
Vendor Phone	613-446-4544	**Customer POID**	
		Customer Tax #	10127-2607
Ship To Contact		**Terms**	Net 30
Ship To Phone		**Currency**	CAD
Ship Via:	VENDOR'S TRUCK	**FOB**	FCA – (Free Carrier)
Ship Acct:			

Line Nbr	Reference / Vendor Part Number / Line Comments / Delivery Comments	Description/ Mfg ID	Req Date/ Taxable / Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4885-1P	End Fitting	3/7/2014 Yes 3/7/2014		4.00 Each	$96.00	$384
	Manufacture as per drawing D4885 rev.A Made from 17-4SS H900 Round Bar 2.000" B112032						
						Line Total:	$384
2	D4885-2P	End Fitting	3/7/2014 Yes 3/7/2014		5.00 Each recd 4 X	$96.00	$480
	Manufacture as per drawing D4885 rev.A Made from 17-4SS H900 Round Bar 2.000" B112033						
						Line Total:	$480

SP14-3-21

PO Instructions: Procurement Quality Clauses
A004 FAA-PMA /TSO
A005 RIGHT OF ENTRY
A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)
A016 PERSONNEL QUALIFICATION
A024 PROCESS CERTIFICATIONS
A025 CERTIFICATE OF CONFORMANCE
A040 NOTIFICATION OF QUALITY ESCAPE
A041 QUALITY MANAGEMENT SYSTEM

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	Dart Aerospace	Date:	March 19th, 2014	451
Part Number:	D4885-2P	Revision:	A	
PO Number:	PO22838	Qty:	5	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
1	.370	.3699	Section F-F
2	2.298±.005	2.300	
3	R.06	.06	
4	R.75	.75	
5	23.8º	23.8º	
6	.500	.499	
7	.43	.431	
8	.030	.060	
9	Ø.500	.503	
10	.017	.017	
11	.44	.433	
12	1.54	1.544	
13	3.70	3.702	
14	.09 REF	.117	
15	R.06	.06	
16	1.87	1.873	
17	R.13	.130	
18	.60	.602	
19	.34	.342	
20	.063	.065	
21	.60	.600	Auxiliary View I-I
22	.109	.110	
23	.44	.440	
24	Note 6	✓	
25	.11	.117	
26	Ø.250/.249	Ø.2495	
27	.51	.511	
28	.80	.800	
29	.55 REF	.548	
30	R.13	R.125	
31	.065 TYP	.061	Auxiliary View J-J
32	R.49	✓	
33	.97	.974	

First Article Inspection Report

ATG INDUSTRIES INC.

731 Industrielle St
Rockland, Ontario K4K 1T2
Ph: 613 446-4544

Customer:	Dart Aerospace	Date:	March 19th, 2014	451
Part Number:	D4885-2P	Revision:	A	
PO Number:	PO22838	Qty:	5	FAI No.

Item	Dimension	Measurement Inspected by: Rene Tougas, Q.C.	Remarks
34	Ø.670+.000/-.001	.6694	
35	1.41	1.409	
36	R.031	✓	
37	1.10 REF	1.098	
38	Ø.86	.860	
39	36.8º	36.4º	Section G-G
40	Ø.125 thru	Ø.125	
41	23.2º	23.4º	Section H-H
42	Ø.125 thru	Ø.125	
43	Material:	17-4SS H900 2.00" RD BAR	Supplied by Customer
44	Treatment:	Liquid Penetrant	PO#: 20140108

skyservice Work Order Traveler

Sky Service F.B.O. Inc.

DOT APP 53-89 / EASA 145.7142 / BDA AMO 385

WO #: MWO20265	**Customer:** Cash Sale	**Dept:** NDT YUL	**Reference:** 20140108
Descr:	**PN:**	**S/N:**	**Qty:** 1
Make:	**Model:**	**Reg:**	**A/C S/N:**
TSN: 0	**CSN:** 0	**TSO:** 0	

Task: UNSCHEDULED | **Sequence:** 1

Work Required:

CARRY OUT NDT ON 28 PARTS AS PER PO: 20140108

Action Taken:	Date:	Initial/Stamp:
LPI C/O AS PER ASTM E-1417M-13 NO CRACK FOUND PEN.(ZL-37 , B#10A070), CLEAN(SKC-S,B#09F21K),DEV.(SKD-S2,B#09L04K) EMU.(ZR-10B,B#10A074).	MAR 17 2014	DOT - APP 20 53-89

Description	*Location*	*P/N*	*Qty*	*Batch*	*S/N Off*	*S/N On*

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature:	**ACA/SCA Stamp**	Date:
Name: RAFIK MELIKIAN	DOT - APP 20 53-89	MAR 17 2014